



# Program Management Office, Medical Support Systems



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# AMEDD Shelter History since DEPMEDS

- Aging DEPMEDS system ~ 25 years
- 1999 Future Medical Shelter Systems (FMSS) born CSI ~ ORD
- 2001- ORD withdrawn
- 2003 Vertigo Air Beam Shelter Developed under FMSS + ISO potential replacements
- 2004 SG directs interim "shelter" needed
- 2005 Tent-off at Fort Polk Alaska chosen CSI supported (Vertigo not mil-spec tested or production ready)
- 2006 Force Provider adopts AMEDD developed Vertigo Air Beam shelter
- 2006-2009 MRMC is working with DCDD on new reqs using FP CPD, and potentially migrating requirements to PM Force Sustainment/Force Provider. Desire is to be the same as "big Army" and use shelter technology that MRMC helped develop under Future Medical Shelter System Program.





#### Shelter Efforts under AMEDD

- Inclusion in Force Provider (CPD PM FSS, PM Force Provider, CASCOM, PM COLPRO, OTSG and AMEDD)
- Continued fielding of Interim AMEDD shelters MRI
- Testing of the Medical Re-engineering Initiative (MRI) in April FY10
- Continued fielding of Interim AMEDD shelters to CSHs
- Testing of the Force Provider Expeditionary Medical Shelters as a CSH
- Future Medical Shelters System Open Competition in FY10 for hard-walled shelters
- MRMC supporting research on soft-walled and hard-walled shelter improvements at Natick, including Force Provider



- AMEDD reqs inserted into FP CPD Staffing now to ARCIC
- MRMC promised 1 EEH in FY10 and 1 EEH in FY11 as a foot in the door with PM FSS and Army G8
- ASA-ALT MRMC DASC identified short-falls in OPA funds in FY10 and FY11
- Result funds pursued in FY09 Funds obtained for OPA
- Currently 6 84 bed EEHs plus billeting are on order with FP (soft-walled shelters only)
- Schedule is approximately 24 weeks for 1st EEH
- Force Provider Expeditionary Medical Shelters (FPE-MS) will not be fielded until COLPRO issues resolved.
- Plan is for FY14 POM cycle at 2 248 bed CSH per year, up to 26





## Issues with moving to FP early

- FP COLPRO Not tested
- Configuration challenges
- COLPRO Kitting doesn't align with 32' only FP CSH need to identify potential compatibility problems
- Conflicts with current MRI program
- Current testing of MRI is scheduled for the Spring April
- AMEDD will have 3 shelters TEMPER, Alaska, FP logistics impact for AMEDD-MRMC
- Fielding Strategy is needed dependent on testing
- Form, Fit and Function testing in late FY10, early FY11 of FPE-MS

AMEDD Interim Shelter Fielding Schedule

- Activities/Units Fielded To-Date:
  - RTS-MED Ft. Gordon, GA
  - RTS-MED Ft. McCoy, WI
  - RTS-MED Camp Parks, CA
  - Camp Bullis Training Site, San Antonio, TX
  - 121 Gen Hospital, Seoul, Korea
  - 28<sup>th</sup> CSH, Ft. Bragg, NC
- Future Fielding FY 09-10 (based upon funding for support ops; IAW USAMMA Fielding Schedule – work in progress):

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- 31st CSH 84 Bed
- APS Japan EAC
- Korea Corps
- 212th CSH 84 Bed





## Testing – FY10

- COLPRO function evaluation testing for CP DEPMEDS MRI configuration – currently the AMEDD Test Board, DCDD and MRMC is working on this with the 115<sup>th</sup> CSH (Medical Reengineering effort replaces MF2K)
- Form, fit, function evaluation testing for Force Provider Expeditionary – Medical Shelters configuration – Just starting
- Open Competition for FMSS Hard-walled shelters
- Open Competition for FST Trailer based system





#### **FMSS CSI OPA Funds**

- Have CSI OPA funds for open competition
- Vendors under FMSS have completed Mil-Spec Testing
- Plan on competitive down select in early FY10 for Hardwalled shelters
- Need USAMMA assistance on procurement and source selection
- Source Selection Board staffed
- Procurement package is in the works for Nov submission to contracting branch
- Trailer based FST system will follow



### **MRMC Funded RDT+E Efforts at Natick**

Fabric Structures Team, Engineering Fabrication Directorate Natick
 FP COLPRO Analysis

HEPA filter work

Insulation efforts, lighting, net energy studies and misc

Hard-walled Shelters Composite Structures Team Natick

New panel design for current ISOs – using Department of Forestry and Navy resin based materials – lower cost and easier to make and lower LCC

Auto-leveling system

Floor stabilization

ISO lighting

Smart Power management

 Helped Fund development of the Force Provider Personal Hygiene Shelter (MUMS) and BICON solutions for the CSH





## 3D Engineered Fiberboard Investigation

#### • Why:

- Originally developed to facilitate housing and furniture industries,
   make use of forest "waste" materials and consumer wastes
- Potential to replace "specialty" nomex honeycomb core with mass produced core material
  - Lower cost due to economies of scale
- Potential to set new standard for next generation of shelters
  - Low cost one time use structure
    - Medium term deployment (3-5 years)
    - Biodegradable
    - Reduced logistics burden
- Potential to reduce ISO Shelter cost
  - Lower manufacturing costs
  - Lower materials cost





#### **Self Rigidizing Panel Construction**



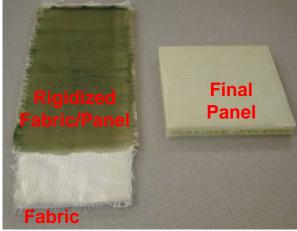
#### Investigation

## • Why:

- Panel would start as flat fabric which would be wetted with epoxy resin in a continuous automated process.
- As fabric is wetted, the cross stitch threads would absorb epoxy and would begin to "stand up", creating a threedimensional structure.
- As the epoxy sets, a large flat structural panel would be created which would be cut to dimension for final work and shelter assembly.

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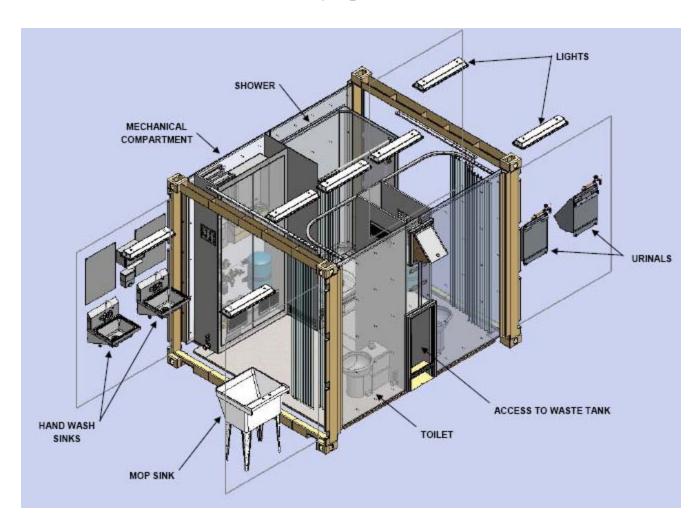
- Potential to reduce ISO Shelter cost
  - Lower manufacturing costs
  - Lower materials cost







## **Personal Hygiene Shelter**







#### 772<sup>nd</sup> FAST Team OEF

- Requirement for a trailer based ecu/generator/shelter system that could be towed by a JD Gator – transport by Chinnok
- Under FMSS, parallel development of the Expeditionary Shelter System ESS, 1 prototype fielded to OEF for evaluation

Trailer
Based Gen
Set, ecu and
Air-beam
shelter











## Way Ahead

- Continue to work with CASCOM, PM FSS, PM Force Provider, and PM COLPRO
- Test MRI in the Spring
- Continue to field AMEDD Interim Shelters
- Test Force Provider Expeditionary Medical Shelters configuration – form, fit and function
- Resolve COLPRO issues with FP
- Open competition in FY10 for ISOs and FST Trailer Shelter
- Continue to support Natick in shelter advancements







**Expeditionary Shelter System** 

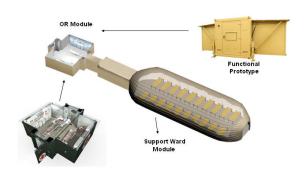


MRI - Alaska



**MSPU** 

**Questions?** 



**EADS ISO 2 sided** 



**Force Provider** 



**MMIC ISO 2 sided**